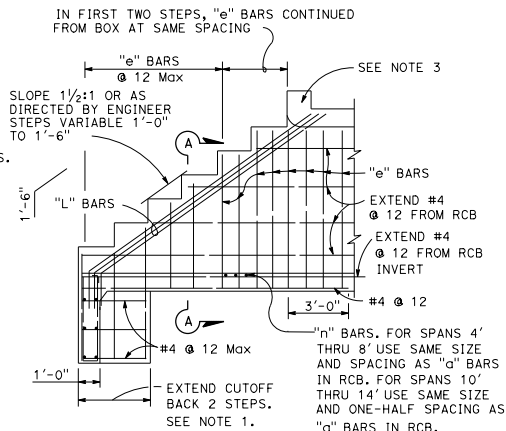
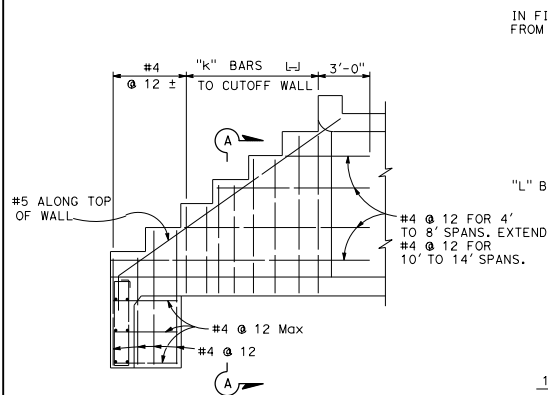


LONGITUDINAL SECTION
Showing reinforcement in outside face

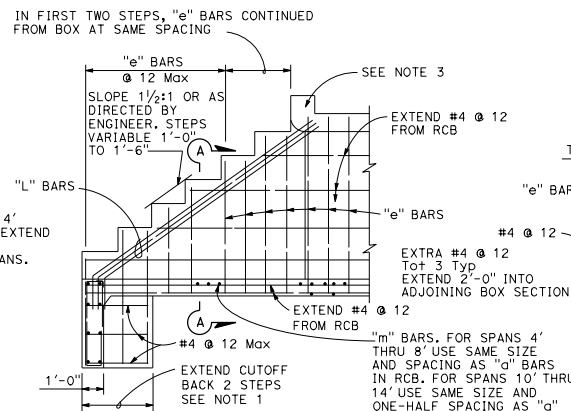


LONGITUDINAL SECTION
Showing reinforcement in inside face

TYPE "E" STEPPED WINGWALL (SINGLE BOX CULVERT)

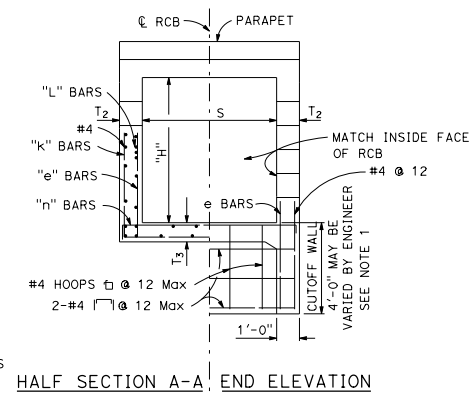


LONGITUDINAL SECTION
Showing reinforcement in outside face



LONGITUDINAL SECTION
Showing reinforcement in inside face

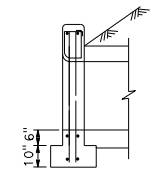
TYPE "E" STEPPED WINGWALL (MULTIPLE BOX CULVERT)



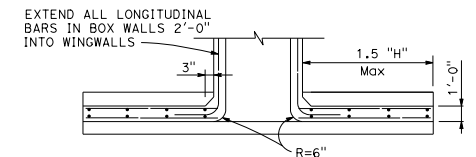
Dimensions S and T₂ to be same as adjacent RCB.
T₂ = Same as adjacent RCB (8" Min).

HALF SECTION A-A END ELEVATION

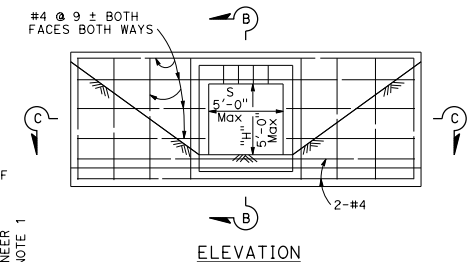
Dist	COUNTY	ROUTE	POST MILES	SHEET TOTAL
			TOTAL PROJECT	No.
<p>REGISTERED CIVIL ENGINEER</p> <p>May 31, 2018</p> <p>PLANS APPROVAL DATE</p> <p>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</p>				
<p>REGISTERED PROFESSIONAL ENGINEER</p> <p>Carl M. Duong</p> <p>No. C59976</p> <p>EXP. 6-30-18</p> <p>CIVIL</p> <p>STATE OF CALIFORNIA</p>				



SECTION B-B



SECTION C-C



TYPE "D" STRAIGHT WINGWALL

Details similar for multiple span boxes.
See Note 3.

DETAIL OF DESIGN LOADING CASES - TYPE "D" STRAIGHT WINGWALL

- Case I Level + 240 psf surcharge
Case II 2:1 sloping ground with no surcharge
Case III 1 1/2:1 limited slope (5'-0" Max height) + 240 psf surcharge

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

BOX CULVERT WINGWALLS TYPES D AND E

NO SCALE

D85

NOTES:

1. Eliminate cutoff walls if adjacent channel is paved.
2. For "H" not shown use reinforcement for next greater height.
3. For parapet details not shown see Standard Plan D82.

TABLE OF REINFORCEMENT FOR TYPE "E" WINGWALLS										
"H" (SEE NOTE 2)	3'	4'	5'	6'	7'	8'	10'	12'	14'	
"K" BAR No.	#4	#4	#5	#5	#5	#5	#5	#5	#5	
"K" SPACING	@ 12	@ 12	@ 12	@ 10	@ 9	@ 8	@ 7	@ 5	@ 4	
"L" BAR No.	#5	#5	#6	#6	#7	#7	#7	#7	#7	
"L" NUMBER EACH WALL	2	2	3	3	3	3	3	3	3	